HSTL Hazardous Substances Technical Liasions

OFFICE OF RESEARCH AND DEVELOPMENT HAZARDOUS SUBSTANCES TECHNICAL LIAISON REGION 9 NEWSLETTER

Winter 2006, Edition 34

Happy New Year! Welcome to the first HSTL Region 9 newsletter of 2006. Let's get the year off to a good start with a newsletter full of the latest information out there on waste cleanup topics. I've finally gotten around to putting this into a more readable format for you. Instead of an email that scrolls down forever (I know, I know!), I've implemented a simple suggestion to convert the text to a .pdf file and just attach it to an email. I hope it works better for you.

This quarter, we'll concentrate on the standard updates of new documents and training opportunities. One thing to note is the increasing number of internet seminars available these days. Thanks in large part to the ITRC (Interstate Technical and Regulatory Council) and EPA's Jeff Heimerman, there are many short seminars available online. And the best news is that they are free - a good thing in these days of little travel and training money. So take advantage of them! I've listed them at the top of the "Datebook" section.

Just a word or two about our EPA Hurricane Katrina work. Since the last newsletter (October '05), a number of you out there have had the chance to help out with EPA's work down in New Orleans and surrounding areas. It didn't matter whether you were from Regions or ORD, a number of us lent a hand with matters technical and otherwise. Thanks to everyone who helped out, no matter in what capacity. It was an unprecedented event and EPA is helping the folks who live there to recover.

As a final note, changes in the Region 9 library are beginning to be implemented. Is this happening in other Regions? What it means immediately for Region 9 is cutbacks in staff and hours. Being in the "information transfer" business has made me appreciate their assistance to EPA and the public. I hope these cutbacks don't affect our productivity. I am no match for their expertise, but will try and help you find Superfund documents if you have trouble. Remember, I can also assist you with Superfund / RCRA / Brownfields technical support through ORD. Please take advantage of that. If you need more information on what this means, please give me a call.

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Winter 2006 Edition of the Region 9 HSTL Newsletter:

N A T I O N A L N E W S

A Reminder About the Superfund Sediments Resource Center

(From OSWER)

The Superfund Sediment Resource Center (SSRC) was created over a year ago to assist EPA project managers with site-specific technical issues related to the assessment and management of risks at contaminated sediment sites. The focus of the SSRC is to provide review and comment on topics related to site characterization such as data collection, data evaluation, and sediment stability; modeling (e.g., hydrodynamic, contaminant fate and transport, and food chain); ecological and human health risks; and the efficacy of remedies such as capping, dredging, monitored natural recovery (MNR), and treatment technologies.

The SSRC is designed to provide timely reviews of draft technical work products prepared by EPA, Responsible Parties, States, and Federal Facilities. It provides EPA another opportunity to continue our

commitment to improve our remedy decision making at contaminated sediment sites. Look at it as an additional resource to our local and ORD technical support resources.

RPMs can access the SSRC via e-mail at **sedimentsolutions@ttemi.com** or by telephone at **703-390-0698**. Consisting of a core staff from OSRTI supported by extramural and in-house scientists and engineers, the SSRC will work with the requesting RPM to access the appropriate expert(s). The SSRC level of effort for most requests is expected to be approximately 40 hours with a turn-around time of less than 30 days.

USGS Technical Announcement: Orthorectified Landsat Digital Data Now Available From USGS

The US Geological Survey (USGS) now offers, at no cost, selected Landsat 4, 5 and 7 satellite data. Orthorectified Landsat data are available for free download from the Global Visualization Viewer (GloVis) at http://glovis.usgs.gov and Earth Explorer at http://earthexplorer.usgs.gov .

The Landsat Orthorectified data collection is a global set of high-quality, relatively cloud-free orthorectified Landsat 4-5 Thematic Mapper (TM) and Landsat 7 Enhanced Thematic Mapper Plus (ETM+) imagery. Selected and generated through NASA's Commercial Remote Sensing Program, the datasets provide two full sets of global coverage over an approximate 10-year interval (circa 1990 and circa 2000) and total nearly 16,000 scenes. Other data sets will be added as they become available, including the Landsat Orthorectified Multispectral Scanner (MSS) data set (circa 1975).

Users can download an entire scene, containing all bands, metadata, jpeg and header information in a single zipped format file. For more information regarding Orthorectified data, please go to http://eros.usgs.gov/products/satellite/landsat_ortho.html or contact USGS Customer Service, EROS, 800-252-4547 or custserv@usgs.gov.

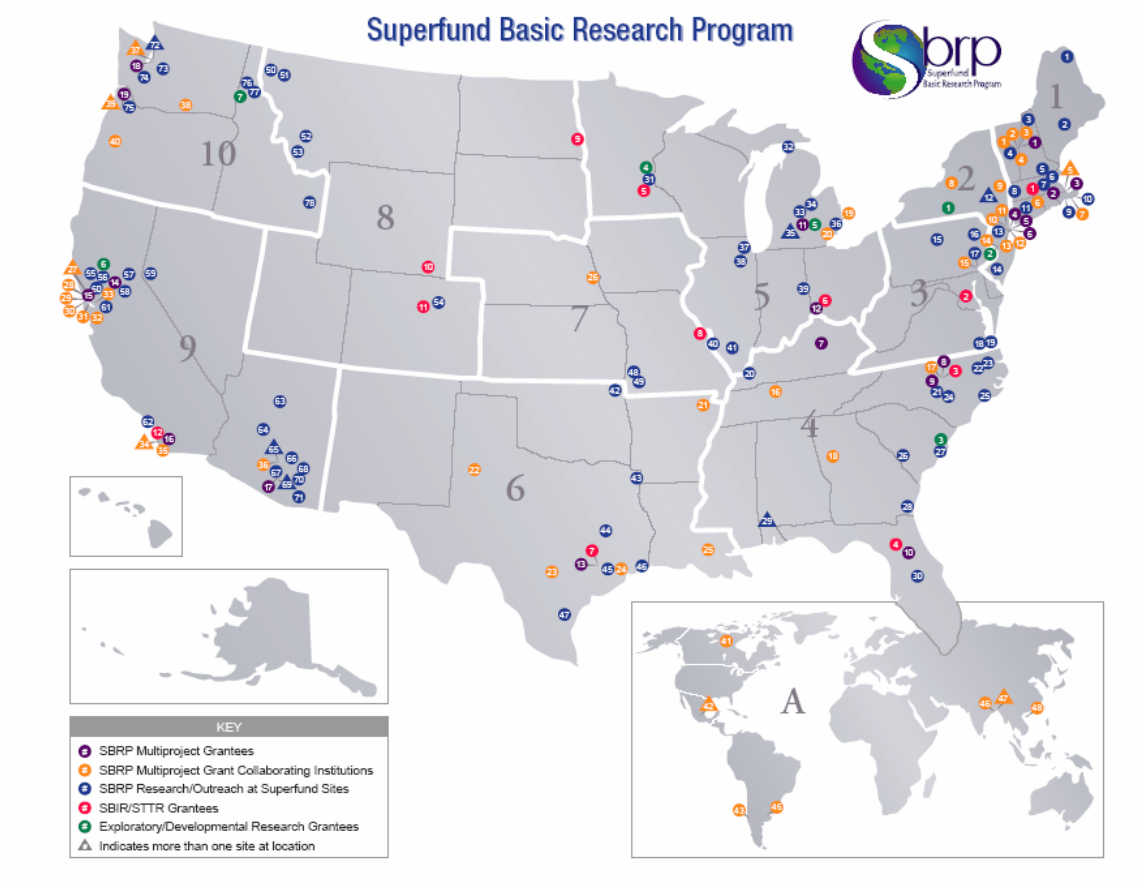
The Landsat Program is the longest running program providing vital images of the Earth?s surface from space. The first Landsat satellite was launched in 1972 and since then, Landsat satellites have been providing a constant stream of moderate-resolution images. In 1999, the Landsat Program took a giant leap forward technologically with the launch of Landsat 7. The instruments on the Landsat satellites have acquired millions of images of the surface of the planet, providing a unique resource for scientists who study agriculture, geology, forestry, regional planning, education, mapping and global change research.

The USGS serves the nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life.

**** http://www.usgs.gov **** (Contact: Wayne Miller, 605-594-6161)

Superfund Basic Research Program (SBRP) Research Articles

The SBRP has funded research/outreach activities at over 100 hazardous waste sites. It falls under the National Institute of Environmental Health Sciences (NIEHS). This research is described in detail on their webpage (http://www-apps.niehs.nih.gov/sbrp/) and the locations are shown on the map below.



Here are the titles of the recent papers released by the SBRP since mid-2005. For more details on these or past research briefs by year, go to: http://www-apps.niehs.nih.gov/sbrp/researchbriefs/index.cfm .

1. Identifying Predictors of Mercury Burdens in Fish
2. Manganese Exposure via Drinking Water and Children's Intellectual Function
3. Lead-Induced Oxidative Stress in Astroglia
4. Advances in Photocatalytic Remediation Technology
5. Understanding the Mechanisms of Naphthalene-Induced Cytotoxicity
6. Microelectrodes for Environmental Monitoring

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US EPA Drinking Water Researchers Provide Arsenic Removal Training

(From NRMRL News, Nov 2005)

At a national workshop on Arsenic Removal from Drinking Water, held August 16-18, 2005 in Cincinnati, Ohio, EPA researchers provided in-depth treatment technology training to about 170 participants from a variety of public and private organizations. The workshop was designed primarily for state drinking water staff, design engineers, and small systems owners and operators, and it attracted representation from 28 states. The program covered arsenic regulations and requirements, as well as treatment technologies, design and operation criteria, residual disposal and costs.

In January 2001, the federal arsenic standard was reduced from a 50 µg/L maximum contaminant level to 10 µg/L. Since the new rule was established, the EPA's Office of Research and Development (ORD) has led efforts to provide more cost-effective technologies for small drinking water systems, as well as technical assistance and training to help owners and operators improve arsenic removal treatment technologies and reduce compliance costs.

Workshop presentations by staff from EPA's ORD and Office of Ground Water and Drinking Water offered fundamental information on arsenic treatment technologies, compliance guidance, and system design. Other presentations were made by academic and consultant specialists on arsenic chemistry and reduction. On the third and final day of the workshop, attendees participated in a NRMRL Treatment Decision Exercise, which gave them the opportunity to put into practice some of the information presented.

The success of the workshop and the ongoing need for arsenic treatment information has made future workshops likely; information on arsenic treatment technology research and future workshops is available at http://www.epa.gov/ORD/NRMRL/arsenic/ and/or http://www.epa.gov/safewater/arsenic.html.

Message Mapping: New EPA Guide For Effective Crisis Communication

(From NRMRL News, Jan 2006)

Communicating information about everyday health risks, such as smoking or obesity, is a significant challenge for health professionals. But far more challenging is the need to communicate health risks in a crisis situation--actual or potential. Recent public health disasters such as the Hurricane Katrina aftermath, demonstrate the need to provide clear and consistent messages to the public, the news media, policy makers and other stakeholders. One powerful tool for risk managers facing a crisis is a new systems-based technique for analyzing and presenting information called Message Mapping. Similar to information mapping systems that are gaining favor in the private sector, message mapping as a public health risk management tool was first adopted following the anthrax attacks of 2001. Now EPA risk management researchers have applied the message mapping technique to environmental crisis communication in a new workbook called Risk Communication in Action: Tools of Message Mapping. The goal of the workbook is to create effective risk communication messages through the construction and labeling of units of information. The result is a "map" for delivering credible organizational information to the media, the public, and all other affected groups in a wide range of crisis situations.

For the complete article, please go to: http://www.epa.gov/ORD/NRMRL/news/news012006.htm .

U.S. EPA Workshop on Nanotechnology for Site Remediation

A workshop on the topic of using nanomaterials for site remediation was held back in October in Washington, DC. The purpose of the workshop was to present the latest research results from federally sponsored research grants and current practices in order to raise the level of understanding and explore the use of nanotechnology for hazardous waste site remediation. Plenary talks were followed by break-out sessions. The workshop was open to members of the academic, government, and industrial communities, as well as the general public.

The workshop served as a communication and scientific reporting forum on remediation research and technologies and as a stimulus for increased collaborations among the various researchers and government scientists. It also served as a forum for discussion of research needs, barriers and incentives for applying new research results and technologies for remediation.

I've included a listing of the presentations and speakers in the table below. Proceedings will be published and will include an update on federally funded research and current applications. A partnership for a future solicitation for research on nanotechnology and site remediation will be formed. At present, a draft version of a proceedings webpage is located at: http://www.emsus.com/frtr/nano/index.htm . (Be aware that this is draft and may change at some point in the near future.)

Talk	Speaker and Affiliation
Can Nanotechnology Thrive in the Environmental Technology "Bazaar"?	Walter Kovalick Jr., Ph.D. Director Technology Innovation and Field Services Division U.S. Environmental Protection Agency
Navy Strategy to Innovative Technology Implementation	Richard Mach Naval Facilities Engineering Command
Nano-Scale Iron Particles: Synthesis, Characterization, and Applications	Wei-Xian Zhang Lehigh University
Oxidation of Organic Contaminants on Nanoparticulate Zero Valent Iron (ZVI)	David Sedlak University of California, Berkeley
Structure and Reactivity of NanoParticles Containing Zero Valent Iron (ZVI): Bridging the Gap Between Ex Situ Properties and In Situ Performance	Paul Tratnyek Oregon Health and Science University
Heavy Metal Sequestration Using Functional Nano-Porous Materials	Glen Fryxell Pacific Northwest National Laboratory
Dendritic Nanomaterials for Environmental Remediation	Mamadou Diallo California Institute of Technology
Nanotechnology and the Environment: Nano-Scale Research at Temple University	David Kargbo U. S. Environmental Protection Agency, Region 3
Field Performance of Nano-Scale Emulsified Zero Valent Iron (ZVI)	Jacqueline Quinn National Aeronautics and Space Administration
Use of Nano- and Micro-Scale Zero Valent Iron (ZVI) at Navy Sites: A Case Study	Nancy Ruiz Department of the Navy
Implementation of a Nano-Scale Iron Source Remediation Demonstration - From Laboratory to Field	Keith Henn TetraTech NUS, Inc.
In situ Groundwater Treatment Using Nanoiron: A Case Study	Harch Gill PARS
In Situ Treatments Using Nano-Scale Zero Valent Iron (nZVI) Implemented in North America and Europe	Florin Gheorghiu Golder Associates, Inc.
Evaluation of the Control of Reactivity and Longevity of Nano-Scale Colloids by the Method of Colloid Manufacture	David Vance Arcadis
On day 1 of the workshop, five simultaneous breakout groups discussed research needs and data gaps and reported their findings to the plenary.	All Attendees
Why This Workshop: Why Nanotechnology at EPA?	Barbara Karn Office of Research and Development U. S. Environmental Protection Agency
Legal/Regulatory/Policy Issues	Marty Spitzer House Committee on Science U.S. House of Representatives
Nanoparticle Transport in Porous Media	Mark Wiesner Rice University
Nanoiron in the Subsurface: How Far Will It Go and How Does It Change?	Greg Lowry Environmental Engineering Carnegie Mellon University

Health Risk Assessment of Manufactured Nanomaterials: More than Just Size	Kevin Dreher National Health and Environmental Effects Research Laboratory UU.S. Environmental Protection Agency
Nano and the Public: Duh, Yuck, and Wow!	Julia Moore Project on Emerging Nanotechnologies Woodrow Wilson International Center for Scholars
On day 2 of the workshop, five simultaneous breakout groups discussed public perception and communication; technology transfer and validation; and legal, regulatory, and policy issues and reported their findings to the plenary.	All Attendees

L O C A L N E W S

Special Conference Announcement: International Conference on The Future of Agriculture: Science, Stewardship, and Sustainability

A conference co-sponsored by my ORD colleagues, the Hazardous Substances Technical Liaisons, is set to be held from August 7-9, 2006 in Sacramento, CA. It is also co-sponsored by the Midwest Hazardous Substance Research Center. It will address success stories in the areas of: air quality, water quality, waste management, and environmental stewardship, with the goal of linking promising research and lessons learned from EPA's Superfund Program and other arenas (state of the science) with on-the-ground agricultural activities (state of the practice). Abstracts for an oral presentation or a poster presentation are due March 1, 2006. For a complete list of presentation topics requested and abstract instructions, see: http://www.dce.ksu.edu/dce/conf/ag&environment/ .

EPA Evaluates Approaches for Assessment of Vapor Intrusion

The following article is not specifically about local issues in Region 9, but since we are dealing with a number of vapor intrusion sites, it should be of great local interest. It is from the November, 2005 edition of OSWER's Tech News and Trends.

The U.S. EPA Office of Solid Waste and Emergency Response developed guidelines in 2002 for screening the migration of volatile organic compounds (VOCs) from the subsurface into buildings, otherwise known as “vapor intrusion” (VI). The guidance applies to sites where halogenated organic compounds constitute the primary risk to human health. To supplement the guidance recommendations, EPA currently is evaluating empirical methods that provide increased reliability in VI data quality at a reasonable cost and which address bias caused by nonenvironmental anthropogenic conditions.

To assess VI empirically, EPA’s Office of Research and Development (ORD) recommends concurrent use of sub-slab sampling and indoor air sampling. This combined approach helps to differentiate VOCs potentially originating from environmental sources from those originating from non-environmental sources such as

gasoline, paint, or solvents stored inside buildings. Sub-slab air sampling allows for sample collection directly beneath living spaces, thereby eliminating uncertainty posed by the analysis of data collected from distant monitoring locations. Sub-slab sampling also helps to determine whether, and to what extent, petroleum hydrocarbon biodegradation may be occurring onsite.

A detailed summary of the study will be available from ORD and Region 1 early this year. EPA's earlier guidance, *OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)* [EPA530-D-02-004] is available online at http://www.epa.gov/epaoswer/hazwaste/ca/eis/vapor.htm.

Contributed by Ray Cody, EPA Region 1 (cody.ray@epa.gov or 617-918-1366) and Dominic Digiulio, Ph.D., ORD NRMRL (digiulio.dominic@epa.gov or 580-436-8605) . For complete article, go to: http://clu-in.org/download/newsltrs/tnandt1105.pdf .

DATEBOOK
UPCOMING EVENTS

This section of the newsletter is an attempt to present both EPA and non-EPA sponsored environmental technology related courses and conferences. But being a quarterly publication, it is impossible for this newsletter to always be up-to-date. For the most pertinent information on upcoming EPA courses, see http://www.trainex.org. These events are listed chronologically.

Many of the entries in these newsletters are from TIO's "TechDirect" emails (thank you Jeff Heimerman!). TechDirect prefers to concentrate mainly on new documents and the internet live events. However, they do support an area on the CLU-IN webpage where announcement of conferences and courses can be regularly posted. Sponsors can input information on their events at http://clu-in.org/courses . Likewise, the page has an area for upcoming events that might be of interest. It allows users to search events by location, topic, time period, etc.

Many of you know that www.clu-in.org routinely place seminars in the CLU-IN Studio archive after they have aired. This provides access to the slides and the audio file for each presentation. Some of you requested that we make these audio files more portable. Now we have done that. For more recent seminars, you now have the option to download them in MP3 format which will allow you to listen via portable music players. You may also subscribe to our podcast feed, which will alert you when new seminar archives are available. For more information, see http://clu-in.org/live/archive.cfm .

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ITRC Internet Based Training

These are typically 1-2 hour online courses where the participant follows a webpage presentation, while listening on the phone. Check - http://www.itrcweb.org or http://www.clu-in.org/studio/seminar.cfm for times and registration.
NOTE: All dates/times are subject to change – check http://www.itrcweb.org for the most up-to-date information.

Jan. 24th – *Permeable Reactive Barriers: Lessons Learned and New Directions*
2:00 p.m. to 4:15 p.m. EASTERN Time

January 25th: *NIEHS Superfund Basic Research Program: DNAPLs - Biological Remediation Processes*
2-4 pm EST

Jan. 26th - *Environmental Management at Operational Outdoor Small Arms Firing Ranges*
11:00 a.m. to 1:15 p.m. EASTERN Time

Feb. 7th - *Strategies for Monitoring the Performance of DNAPL Source Zone Remedies*
2:00 p.m. to 4:15 p.m. EASTERN Time

Feb. 9th - *Guidance for Characterization, Design Construction and Monitoring of Mitigation Wetlands*
11:00 a.m. to 1:15 p.m. EASTERN Time

Feb. 23rd – *Radiation Site Cleanup: CERCLA Requirements & Guidance*
11:00 a.m. to 1:15 p.m. EASTERN Time

Feb. 28th - *Triad Approach: A New Paradigm for Environmental Project Management*
2:00 p.m. to 4:15 p.m. EASTERN Time

2006 Waste Management National Meeting (Follow up to the National RCRA Meeting)
01/18/2006 - 01/20/2006
Arlington, VA
http://www.awma.org/events/confs/RCRA2006/default.asp

2006 State/EPA Conference on Environmental Innovation and Results
January 23-25, 2006
Denver, Colorado
www.excelgov.org/StateEPA

"PERCHLORATE 2006:
Progress Toward Understanding and Cleanup"
January 26, 2006
Santa Clara, CA
http://www.grac.org/perchlorate

Contaminant Chemistry and Transport in Soil and Groundwater
January 25 - 26, 2006
Pasadena, California
http://www.nwetc.org/chem-403b_01-06_pasadena.htm

Course Brochure PDF (includes reg. form, directions, and hotel info): http://www.nwetc.org/FILES/chem-403ab_01-06_pasadena.pdf

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"Introduction to Groundwater and Watershed Hydrology:
Monitoring, Assessment and Protection"
February 9-10, 2006
Glendale, CA
http://www.grac.org/hydroreg.html

2006 Waste Tech Landfill Technology Conference
February 27 - March 1, 2006
Phoenix, AZ
http://wasteage.com/news/Landfill-Conference-072505/

Economic Analysis for Ground Water Remediation: A Tool for Decision-Making
February 27-28, 2006
Anaheim, CA
http://www.ngwa.org/

Environmental Industry Summit 2006
March 1 - 3, 2006
San Diego, California
http://www.ebiusa.com/summit2006/

Estimating Times of Remediation Associated with MNA and Contaminant Source Removal
March 2-3, 2006
Denver, CO
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=650

Society of Toxicology 45th Annual Meeting
March 5-9, 2006
San Diego, CA
http://www.toxicology.org/ai/meet/am2006

Environmental Geochemistry of Metals: Investigation and Remediation
March 6-8, 2006
Denver, CO
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=640

AEHS 16TH ANNUAL WEST COAST CONFERENCE ON SOILS, SEDIMENTS, AND WATER
MARCH 13-16, 2006
MISSION VALLEY MARRIOTT
SAN DIEGO, CA
http://www.aehs.com/conferences/westcoast/index.htm

UST/LUST National Conference
March 20-22, 2006
Memphis, TN
http://www.neiwpcc.org/tanks06/

International Symposium on Site Characterization for CO2 Geological Storage (CO2SC 2006)
March 20-22, 2006
Berkeley, CA
http://esd.lbl.gov/CO2SC/

The 2006 Joint Services Environmental Management (JSEM) Conference
Mar. 20-23, 2006
Denver, CO
http://www.jsemconference.com/2006/index.htm

International Conference on Solid Waste Technology and Management
March 26-29, 2006
Philadelphia, PA
http://muse.widener.edu/~sxw0004/21CONF.html

International Conference on Solid Waste Technology and Management
March 26-29, 2006
Philadelphia, PA
http://www.eiforum.org.uk/home.asp?pageID=739

Nano and the Environment symposium at Spring, 2006 ACS meeting
March 26-30, 2006
Atlanta, GA
http://acswebcontent.acs.org/nationalmeeting/atlanta2006/home.html

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World's Best Technology Showcase
Mar. 27 - 29, 2006
Arlington, TX
http://www.wbtshowcase.com/

GLOBE 2006
March 29-31, 2006
Vancouver, Canada
http://www.globe2006.com

Joint 8th Federal Interagency Sedimentation Conference and 3rd Federal Interagency Hydrologic Modeling Conference
April 2-6, 2006
Reno, NV
http://water.usgs.gov/wicp/acwi/sos/conf/call_papers_final_10.01.04.pdf

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Second International Symposium and Exhibition on The Redevelopment of Manufactured Gas Plant Sites (MGP 2006)
April 4-6, 2006
Reading, UK
http://mgp2006.instep.ws/

Nitrate in California's Groundwater: Are We Making Progress?
April 4-5, 2006
Modesto, California
http://www.grac.org/se06.pdf

The New Modflow Course
April 4-7, 2006
Las Vegas, NV
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=653

WasteExpo Conference
April 5-7, 2006
Las Vegas, NV
http://www.wasteexpo.com

Design and Construction Issues at Hazardous Waste Sites Conference
April 19-20, 2006
Philadelphia, PA
http://www.rdra.org/construction/

2006 Ground Water Summit
April 23-26, 2006
San Antonio, TX
http://www.ngwa.org/e/conf/0604235095.cfm

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National Association of Environmental Professionals' 31st Annual Conference
April 23-26, 2006
Albuquerque, NM
http://www.naep.org/cde.cfm?event=114903

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WasteExpo 2006 and Medical Waste Conference
April 24-27, 2006
New Orleans, LA
http://www.wasteexpo.com/

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Low Cost Remediation Strategies for Contaminated Soil and Ground Water
April 25-27, 2006
Chicago, IL
http://www.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=655

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EnviroExpo & Conference 2006
May 2-3, 2006
Boston, MA
http://www.enviroexpo.com/

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Restoring Greenspace: Ecological Reuse of Contaminated Properties in EPA Region 10
May 3-4, 2006
Seattle, WA
http://www.wildlifehc.org/events/Index.cfm?Page=1&EventsID=3919

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Solid/Hazardous Waste Conference and Exhibition
May 3-5, 2006
Gatlinburg, TN
http://www.state.tn.us/environment/swm/conference/

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5th National Monitoring Conference "Monitoring Networks: Connecting for Clean Water"
May 7-11, 2006
San Jose, CA
http://water.usgs.gov/wicp/acwi/monitoring/conference/2006/calendar_annct_06.pdf

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2006 NSTI Nanotechnology Conference and Trade Show
May 7-11 2006
Boston, Massachusetts
http://www.nsti.org/Nanotech2006/

2006 IEEE International Symposium on Electronics and the Environment
May 8-11, 2006
San Francisco, CA
http://www.regconnect.com/content/isee/

Collaborative Cleanups: Coordinating Cleanups to Revitalize America's Communities
May 9-10, 2006
Location TBD
Contact: Ellen Manges (202) 566-0195

http://www.epa.gov/landrevitalization

2006 NGWA Western Focus Ground Water Conference
May 16-17, 2006
San Francisco, CA
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=639

MODFLOW and More 2006: Managing Ground-Water Systems Conference
May 21-24, 2006
Golden, Colorado
http://typhoon.mines.edu/events/modflow2006/modflow2006.shtml

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Isotopic & Hydrogeological Characterization of Fractured Rock Settings: Current and Novel Approaches
May 22-23, 2006
Pittsburgh, PA
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=654

Fifth International Battelle Conference on Remediation of Chlorinated and Recalcitrant Compounds
May 22-25, 2006
Monterey, CA
http://www.battelle.org/environment/er/conferences/chlorcon/default.stm

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Contaminated and Hazardous Waste Site Management: Theory, Practice, and Outdoor Field Demonstrations
June 12-16, 2006
Toronto, Canada
http://www.contaminatedsite.com/index.html

EPA's NARPM 2006 Conference
June 19-24, 2006
New Orleans, LA
http://www.epanarpm.org/narpm2006/home.htm

Environmental Forensics
June 20-21, 2006
Columbus, OH
http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=651

10th Annual Green Chemistry & Engineering Conference
June 26-30, 2006
Washington, DC
http://www.sitestories.com/greenchem2006/index.html

2006 Community Involvement Conference and Training
June 27-30, 2006
Milwaukee, WI
http://www.epa.gov/superfund/action/community/ciconference/2006/

The Future of Agriculture: Science, Stewardship, and Sustainability
August 7-9, 2006
Sacramento, CA
http://www.dce.ksu.edu/dce/conf/ag&environment/

Conference on Mercury as a Global Pollutant
Madison, Wisconsin
August 6-11, 2006
www.mercury2006.org

WASTECON 2006
September 19-21, 2006
Charlotte, NC
http://www.swana.org

22nd Annual International Conference on Soils, Sediments and Water
University of Massachusetts Amherst
October 16-19, 2006
www.UMassSoils.com

Second Biennial Central and Eastern European Environmental Health Conference (CEEHC)
September 17-20, 2006
Bratislava, Slovakia
http://www-apps.niehs.nih.gov/sbrp/events/index.cfm

Partners in Environmental Technology Technical Symposium & Workshop
November 28-30, 2006
Washington, D.C.
http://www.serdp.org OR http://www.estcp.org

WEB PAGES

Decision Support Tools (DSTs) Matrix

DSTs are interactive software tools used by decision-makers to help answer questions, solve problems, and support or refute conclusions. They can be incorporated into a structured decision-making process for environment site clean-up. DSTs often support multiple functions, such as data acquisition, spatial data management, modeling, and cost estimating. The matrix is a table that provides general information about each DST, such as the types of files that may be imported to, or exported from, the DST, the characteristics of applicable sites (contaminants and media) and the functions it performs. All DSTs that were evaluated are free to the public. View and use at http://www.frtr.gov/decisionsupport/index.htm .

Triad Project Profiles with Cost & Time Savings Online

The Triad Resource Center (TRC) website provides the information hazardous waste site managers and cleanup practitioners need to implement the Triad effectively. Federal and state partners have documented 15 Triad projects through profiles available on TRC, with additional profiles to be added soon. Each profile describes the primary objective(s) of the project, site history, team members and collaboration methods, real-time measurement technologies,
data management techniques, project timelines, as well as discussions of the Triad elements applied. Electronic documents such as Statements of Work, Sampling and Analysis Plans, and Decision Logic Diagrams are supplied to many profiles to further demonstrate the use of Triad in the project. Furthermore, cost and time savings have been highlighted for each profile. Visitors can access the Triad profiles at: http://www.triadcentral.org/user/index.cfm .

EUGRIS, the web portal for Soil and Water management in Europe

The EUGRIS portal is a web based European information platform, which is openly available and provides comprehensive and overarching information resources for sustainable groundwater and land management practices. EUGRIS provides access to information on soil and groundwater management from throughout the European Union, including research projects, technical information, available training, legislation, guidance and support tools. See: http://www.eugris.info .

CLU-IN's New RSS Feed

Do you want immediate notification when new items are added to CLU-IN? Interested in registering for thier internet seminars as soon as they are available? CLU-IN regulars can now be notified when new content is posted by subscribing to the RSS feed. RSS is a form of web syndication and information aggregation. Instead of having to repeatedly browse websites for information of interest, this information is sent directly to you. CLU-IN's RSS feed provides headlines and short descriptions of new CLU-IN content with links to the full version. This happens when new content is loaded onto the site. Sound useful? Subscribe at:
http://www.clu-in.org/rss/ .

Scribe - Environmental Field Data Capture

Scribe is a software tool developed by the USEPA's Environmental Response Team (ERT) to assist in the process of managing environmental data. Scribe captures sampling, observational, and monitoring field data. Examples of Scribe field tasks include soil, water, air and biota sampling. Scribe can import electronic data including analytical lab result data (EDD) and sampling location data such as GPS. Scribe supports handheld extensions, Scriblets, to capture and import sampling and monitoring data collected on handheld PDAs. For more information, see:
http://www.ertsupport.org/scribe_home.htm .

R E C E N T D O C U M E N T S, D A T A B A S E S, E T C.

These entries are arranged alphabetically. Thanks to TechDirect, Tech Trends, NRMRL News, the ETV Program, DOE, DoD and others for posting their latest documents. And remember, many of these are available in paper format in the Region 9 library. Use your local library.....or it may disappear. It's happening at EPA.....

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December 2005 External Review Draft

(All comments received by January 31, 2006 will be shared with the external peer review panel for their consideration.)

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Serious Scientists Gather 'Round...

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AU: Batterman, S; Godwin, C; Jia, C
JN: Environmental Science and Technology
PD: 2005
VO: 39
NO: 18
PG: 7260-7268
PB: ACS AMERICAN CHEMICAL SOCIETY
IS: 0013-936X
PE: SEP 15
URL: http://www.ingentaconnect.com/search/expand?unc=1054381122
Click on the URL to access the article or to link to other issues of the publication.

TI: Airborne Particles in New Museum Facilities
AU: Salmon, LG; Mayo, PR; Cass, GR; Christoforou, CS
JN: Journal of Environmental Engineering
PD: 2005
VO: 131
NO: 10
PG: 1453-1461
PB: ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS
IS: 0733-9372
URL: http://www.ingentaconnect.com/search/expand?unc=1054478089
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Thanks for reading it! Comments and suggestions are appreciated. If you wish to be added to or deleted from this list, please send me an email. (gill.michael@epa.gov)

Newsletter archives can be found on the EPA intranet site.....http://intranet.epa.gov/ospintra/scienceportal/htm/hstlnews.htm
A number of environmental technology web resources can be found here.....http://www.epa.gov/region09/waste/techlinks/

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